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CLAIM AMENDMENTS

Please amend the present application as indicated hereafter, using ~~strike through effects~~ or double brackets [[]] for deleted matter and underline effects for added matter.

1. (Currently Amended) A method of diagnosing an aggressive form of ~~cancer~~ malignant melanoma, the method comprising the steps of:
 - providing a test genetic sample from a test sample tumor;
 - measuring *Wnt5a* expression in the test genetic sample;
 - analyzing expression of *Wnt5a* by statistical methods, wherein the statistical methods comprise comparing increased expression of *Wnt5a* in the test genetic sample to the gene expression profile of *Wnt5a* from a cluster of pair-matched tumor samples,
 - wherein increased expression of *Wnt5a* in the test sample compared to *Wnt5a* expression in the cluster of pair-matched tumor samples having less than about 3.5% invasive ability indicates the second tumor is aggressive.
- 2.-3. (Canceled)
4. (Previously Presented) A method of diagnosing an aggressive form of malignant melanoma, the method comprising the steps of:
 - measuring *Wnt5a* expression in a test tumor;
 - analyzing expression of *Wnt5a* in the test tumor by statistical methods, wherein the statistical methods comprise comparing increased expression of *Wnt5a* in the test tumor to the gene expression profile of *Wnt5a* from a cluster of pair-matched tumor samples,
 - wherein increased expression of *Wnt5a* in the test tumor compared to *Wnt5a* expression in the cluster of pair-matched tumor samples having non-detectable or no vasculogenic mimicry indicates the test tumor is aggressive; and
 - selecting a first treatment regimen for an individual with the test tumor if the test tumor is aggressive and a second treatment regimen if the test tumor is non-aggressive, wherein the first and second treatment regimens are not the same.

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5-25. (Canceled)

26. (Currently Amended) A method of diagnosing an aggressive form of ~~cancer~~ malignant melanoma, the method comprising the steps of:

measuring *Wnt5a* expression in a test sample tumor;

analyzing expression of *Wnt5a* in the test sample tumor by statistical methods, wherein the statistical methods comprise comparing increased expression of *Wnt5a* in the test sample tumor to the gene expression profile of *Wnt5a* from a cluster of pair-matched tumor samples, wherein increased expression of *Wnt5a* in the test sample compared to *Wnt5a* expression in the cluster of pair-matched tumor sample having a cell motility of less than about 110.7 μm per day indicates the test tumor is aggressive.

27. (Canceled)

28. (Currently Amended) A method of diagnosing an aggressive form of ~~cancer~~ malignant melanoma, the method comprising the steps of:

providing a genetic sample from a test sample of a tumor;

analyzing expression of *Wnt5a* in the test sample of the tumor compared to a *Wnt5a* gene expression profile from a cluster of pair-matched tumor samples, wherein increased expression of *Wnt5a* in the test sample compared to a tumor in the gene expression profile having a particular phenotype indicates that the tumor of the test sample is aggressive.

29. (Canceled)

30. (Previously Presented) The method of claim 28, wherein the phenotype is chosen from at least one of: reduced cell motility, reduced invasive ability, and non-detectable or no vasculogenic mimicry.

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31. (Previously Presented) The method of claim 28, wherein analyzing comprises comparing expression of *Wnt5a* in the test sample of the tumor to a *Wnt5a* gene expression profile from a cluster of pair-matched tumor samples, wherein increased *Wnt5a* expression in the test sample relative to a tumor in the gene expression profile having less than about 3.5% invasive ability indicates the tumor of the test sample is aggressive.

32. (Previously Presented) The method of claim 28, wherein analyzing comprises comparing expression of *Wnt5a* in the test sample of the tumor to a *Wnt5a* gene expression profile from a cluster of pair-matched tumor samples, wherein increased *Wnt5a* expression in the test sample relative to a tumor in the gene expression profile having non-detectable or no vasculogenic mimicry indicates the tumor of the test sample is aggressive.

33. (Previously Presented) The method of claim 28, wherein analyzing comprises comparing expression of *Wnt5a* in the test sample of the tumor to a *Wnt5a* gene expression profile from a cluster of pair-matched tumor samples, wherein increased *Wnt5a* expression in the test sample relative to a tumor in the gene expression profile having a cell motility of less than about 110.7 μm per day indicates the tumor of the test sample is aggressive.